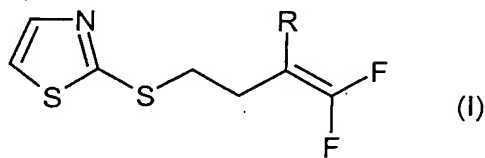


Claims

1. Process for preparing a compound of the formula (I)

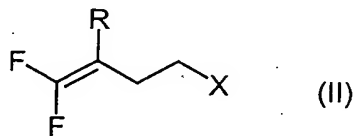


where

R is H or F,

characterized in that

- (a) a compound of the formula (II)



where

R is H or F and

X is bromine, chlorine, mesylate or tosylate,

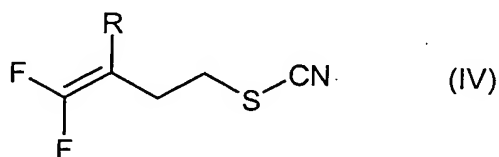
is reacted with a compound of the formula (III)



where

$M^+$  is hydrogen, an ammonium ion, a tetraalkylammonium ion or an alkali metal or alkaline earth metal ion

optionally in the presence of a reaction auxiliary and optionally in the presence of a diluent to give compounds of the formula (IV)



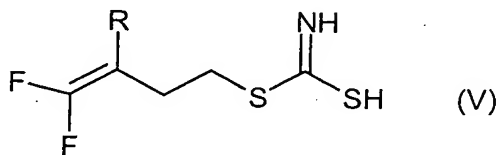
where

R is as defined above,

(b) the latter is then converted by adding hydrogen sulphide or salts thereof,

optionally in the presence of a reaction auxiliary and optionally in the presence of a diluent,

to a compound of the formula (V)



where

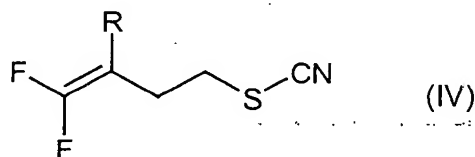
R is as defined above,

and

- (c) the latter is reacted with acetaldehyde, chloroacetaldehyde ( $\text{ClCH}_2\text{CHO}$ ) or the acetals or cyclic acetals thereof, optionally in the presence of an acidic reaction auxiliary and optionally in the presence of a diluent.

5

2. Process for preparing a compound of the formula (IV)

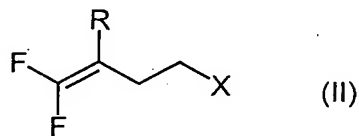


where

10

R is as defined above,

characterized in that compounds of the formula (II)



15

where

R and X are as defined in Claim 1

20

are reacted with a thiocyanate salt of the formula (III)



where

25

$\text{M}^+$  is as defined in Claim 1,

3. Process for preparing compounds of the formula (V)

5



10

$$\begin{array}{c} \text{R} \\ | \\ \text{F} - \text{C} = \text{C} - \text{CH}_2 - \text{CH}_2 - \text{S} - \text{CN} \\ | \\ \text{E} \end{array} \quad (\text{IV})$$

15

20

F/C(=C(R)CCSC(=N)S)/F (V)

where

R is as defined in Claim 1

5 is reacted with acetaldehyde, chloroacetaldehyde ( $\text{ClCH}_2\text{CHO}$ ) or acetals thereof, optionally in the presence of a diluent and optionally in the presence of an acidic reaction auxiliary.

10 5. Process according to Claim 1 or 2, characterized in that a compound of the formula (II) is reacted with  $\text{HSCN}$  in the presence of a base.

6. Process according to Claim 1 or 2, characterized in that a compound of the formula (II) is reacted with  $\text{NH}_4\text{SCN}$ .

15 7. Process according to Claim 6, characterized in that the diluent used in the reaction is an alcohol.

8. Process according to Claim 1 or 3, characterized in that a compound of the formula (IV) is reacted with  $\text{H}_2\text{S}$ .

20 9. Process according to any of Claims 1, 3 and 8, characterized in that the reaction is carried out in the presence of a base.

25 10. Process according to Claim 1 or 4, characterized in that a compound of the formula (V) is reacted with chloroacetaldehyde dialkyl acetal.

11. Process according to any of Claims 1, 4 and 10, which is carried out in the presence of an acid.

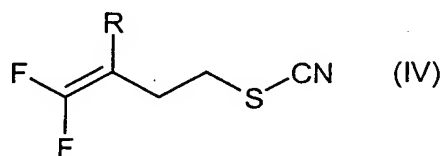
30 12. Process according to Claim 1 or 4, characterized in that a compound of the formula (V) is reacted with chloroacetaldehyde or acetals thereof in the

presence of from 0.1 to 10 mol% of p-toluenesulphonic acid or methanesulphonic acid.

13. Process according to Claim 1 or 4, characterized in that a compound of the formula (V) is reacted with acetaldehyde.

14. Process according to any of Claims 1 to 13, characterized in that R is fluorine.

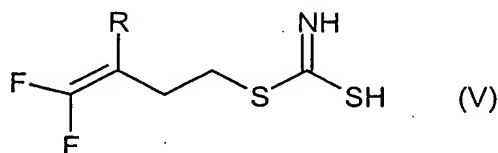
15. Compounds of the formula (IV).....



where

R is as defined in Claim 1.

16. Compounds of the formula (V)



and salts thereof

where

R is hydrogen.